

Title (en)
SYSTEM AND METHOD FOR AIR COOLING OF PREFORMED MOLDINGS

Title (de)
SYSTEM UND METHODE ZUR LUFTKÜHLUNG VON VORFORMLINGEN

Title (fr)
SYSTEME ET PROCÉDÉ DE REFROIDISSEMENT PAR AIR DE PRÉFORMES

Publication
EP 1216134 B1 20060308 (EN)

Application
EP 00940096 A 20000622

Priority
• CA 0000744 W 20000622
• US 39798499 A 19990916

Abstract (en)
[origin: WO0119589A1] The present invention relates to an apparatus and a method of cooling molded preforms. The apparatus and method make advantageous use of air amplifiers to create a flow of cooling air over the molded preforms. In a first embodiment of the present invention, the air amplifiers are mounted to a part removal and cooling robot. In a second embodiment of the present invention, a plurality of air amplifier stations are positioned about an index block to cool the molded preforms. In a third embodiment of the present invention, a vacuuming system is provided to improve the adherence of the air flow created by the air amplifiers to the exterior surfaces of the molded preforms. In a fourth embodiment of the present invention, the air amplifiers are mounted to a movable plate and each amplifier has an internal bore sized to receive a molded preform to be cooled.

IPC 8 full level
B29C 45/72 (2006.01); **B29C 49/64** (2006.01)

CPC (source: EP KR US)
B29C 45/72 (2013.01 - KR); **B29C 45/7207** (2013.01 - EP US); **B29C 49/6427** (2013.01 - EP); **B29C 49/6435** (2022.05 - EP);
B29C 2045/7228 (2013.01 - EP US); **B29C 2049/023** (2013.01 - EP); **B29C 2949/0817** (2022.05 - EP US); **B29C 2949/0872** (2022.05 - EP US);
B29K 2105/253 (2013.01 - EP US)

Citation (examination)
US 5795517 A 19980818 - HEISLER DANIEL F [CA], et al

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0119589 A1 20010322; AT E319548 T1 20060315; AU 5517200 A 20010417; AU 760227 B2 20030508; BR 0014074 A 20020521;
CA 2376670 A1 20010322; CA 2376670 C 20050405; CN 1234519 C 20060104; CN 1373703 A 20021009; DE 60026524 D1 20060504;
DE 60026524 T2 20061109; EP 1216134 A1 20020626; EP 1216134 B1 20060308; JP 2003509237 A 20030311; JP 3805250 B2 20060802;
KR 100445950 B1 20040825; KR 20020033807 A 20020507; US 6299804 B1 20011009

DOCDB simple family (application)
CA 0000744 W 20000622; AT 00940096 T 20000622; AU 5517200 A 20000622; BR 0014074 A 20000622; CA 2376670 A 20000622;
CN 00812883 A 20000622; DE 60026524 T 20000622; EP 00940096 A 20000622; JP 2001523196 A 20000622; KR 20027003453 A 20020315;
US 39798499 A 19990916